OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/007,700

DATE: 12/18/2001
TIME: 16:18:48

Input Set : A:\455c17.app.txt
Output Set: N:\CRF3\12182001\J007700.raw

ENTERED

```
 4 <110> APPLICANT: Wang, Tongtong
 5            Wang, Aijun
 6            Skeiky, Yasir A.W.
 7            Li, Samual X.
 8            Kalos, Michael D.
 9            Henderson, Robert A.
10            McNeill, Patricia D.
11            Fanger, Neil
12            Retter, Marc W.
13            Durham, Margarita
14            Fanger, Gary R.
15            Vedvick, Thomas S.
16            Carter, Darrick
17            Watanabe, Yoshihiro
18            Peckman, David W.
19            Cai, Feng
20            Foy, Teresa M.
24 <120> TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
25            AND DIAGNOSIS OF LUNG CANCER
28 <130> FILE REFERENCE: 210121.455C17
```
C--> `30 <140> CURRENT APPLICATION NUMBER: US/10/007,700`
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31 <141> CURRENT FILING DATE: 2001-11-30
33 <160> NUMBER OF SEQ ID NOS: 469
35 <170> SOFTWARE: FastSEQ for Windows Version 4.0
37 <210> SEQ ID NO: 1
38 <211> LENGTH: 315
39 <212> TYPE: DNA
40 <213> ORGANISM: Homo sapiens
42 <220> FEATURE:
43 <221> NAME/KEY: misc_feature
44 <222> LOCATION: 236, 241
45 <223> OTHER INFORMATION: n = A,T,C or G
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48 gcagagacag actggtggtt gaacctggag gtgccaaaaa agccagctgc gggcccagga 60
49 cagctgccgt gagactcccg atgtcacagg cagtctgtgt ggttacagcg cccctcagtg 120
50 ttcatctcca gcagagacaa cggaggaggc tcccaccagg acggttctca ttatttatat 180
```
W--> `51 gttaatatgt ttgtaaactc atgtacagtt tttttggggg gggaagcaat gggaanggta 240`
W--> `52 naaattacaa atagaatcat ttgctgtaat ccttaaatgg caaacggtca ggccacgtga 300`
```
53 aaaaaaaaaa aaaaa                                                   315
55 <210> SEQ ID NO: 2
56 <211> LENGTH: 380
57 <212> TYPE: DNA
58 <213> ORGANISM: Homo sapiens
60 <400> SEQUENCE: 2
61 atttaggctt aagattttgt ttacccttgt tactaaggag caaattagta ttaaagtata 60
62 atatatataa acaaatacaa aaagttttga gtggttcagc tttttattt tttttaatgg 120
63 cataactttt aacaacactg ctctgtaatg ggttgaactg tggtactcag actgagataa 180
```

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      64 ctgaaatgag tggatgtata gtgttattgc ataattatcc cactatgaag caaagggact 240
      65 ggataaattc ccagtctaga ttattagcct ttgttaacca tcaagcacct agaagaagaa 300
      66 ttattggaaa ttttgtcctc tgtaactggc actttggggt gtgacttatc ttttgccttt 360
      67 gtaaaaaaaa aaaaaaaaaa                                         380
      69 <210> SEQ ID NO: 3
      70 <211> LENGTH: 346
      71 <212> TYPE: DNA
      72 <213> ORGANISM: Homo sapiens
      74 <220> FEATURE:
      75 <221> NAME/KEY: misc_feature
      76 <222> LOCATION: 316, 317, 318, 322, 323, 326, 329, 330, 331, 336, 337, 339,
      77         340, 342, 343
      78 <223> OTHER INFORMATION: n = A,T,C or G
      80 <400> SEQUENCE: 3
      81 ttgtaagtat acaattttag aaaggattaa atgttattga tcattttact gaatactgca 60
      82 catcctcacc atacaccatc cactttccaa taacatttaa tcctttctaa aattgtaagt 120
      83 atacaattgt actttctttg gattttcata acaaatatac catagactgt taattttatt 180
      84 gaagtttcct taatggaatg agtcattttt gtcttgtgct tttgaggtta cctttgcttt 240
      85 gacttccaac aatttgatca tatagtgttg agctgtggaa atctttaagt ttattctata 300
W--> 86 gcaataattt ctattnnnag annccnggnn naaaannann annaaa          346
      88 <210> SEQ ID NO: 4
      89 <211> LENGTH: 372
      90 <212> TYPE: DNA
      91 <213> ORGANISM: Homo sapiens
      93 <220> FEATURE:
      94 <221> NAME/KEY: misc_feature
      95 <222> LOCATION: 297, 306, 332
      96 <223> OTHER INFORMATION: n = A,T,C or G
      98 <400> SEQUENCE: 4
      99 actagtctca ttactccaga attatgctct tgtacctgtg tggctgggtt tcttagtcgt 60
     100 tggtttggtt tggttttttg aactggtatg tagggtggtt cacagttcta atgtaagcac 120
     101 tctcttctcc aagttgtgct ttgtggggac aatcattctt tgaacattag agaggaaggc 180
     102 agttcaagct gttgaaaaga ctattgctta tttttgtttt taaagaccta cttgacgtca 240
W--> 103 tgtggacagt gcacgtgcct tacgctacat cttgttttct aggaagaagg ggatgcnggg 300
W--> 104 aaggantggg tgctttgtga tggataaaac gnctaaataa cacaccttta cattttgaaa 360
     105 aaaacaaaac aa                                               372
     107 <210> SEQ ID NO: 5
     108 <211> LENGTH: 698
     109 <212> TYPE: DNA
     110 <213> ORGANISM: Homo sapiens
     112 <220> FEATURE:
     113 <221> NAME/KEY: misc_feature
     114 <222> LOCATION: 8, 345, 422, 430, 433, 436, 438, 472, 481, 486, 515, 521,
     115         536, 549, 553, 556, 557, 559, 568, 593, 597, 605, 611, 613,
     116         616, 618, 620, 628, 630, 632, 634, 635, 639, 643, 647, 648,
     117         649, 652, 654, 658, 664, 690
     118 <223> OTHER INFORMATION: n = A,T,C or G
     120 <400> SEQUENCE: 5
W--> 121 actagtanga tagaaacact gtgtcccgag agtaaggaga gaagctacta ttgattagag 60
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```
       122 cctaacccag gttaactgca agaagaggcg ggatactttc agctttccat gtaactgtat 120
       123 gcataaagcc aatgtagtcc agtttctaag atcatgttcc aagctaactg aatcccactt 180
       124 caatacacac tcatgaactc ctgatggaac aataacaggc ccaagcctgt ggtatgatgt 240
       125 gcacacttgc tagactcaga aaaaatacta ctctcataaa tgggtgggag tattttgggt 300
W--> 126 gacaacctac tttgcttggc tgagtgaagg aatgatattc atatnttcat ttattccatg 360
       127 gacatttagt tagtgctttt tatataccag gcatgatgct gagtgacact cttgtgtata 420
W--> 128 tntccaaatn ttngtncngt cgctgcacat atctgaaatc ctatattaag antttcccaa 480
W--> 129 natgangtcc ctggtttttc cacgccactt gatcngtcaa ngatctcacc tctgtntgtc 540
W--> 130 ctaaaaccnt ctnctnnang gttagacngg acctctcttc tcccttcccg aanaatnaag 600
W--> 131 tgtgngaaga nanccncncn cccccctncn tncnncctng ccngctnnnc cncntgtngg 660
W--> 132 gggngccgcc cccgcggggg gacccccccn ttttcccc                       698
       134 <210> SEQ ID NO: 6
       135 <211> LENGTH: 740
       136 <212> TYPE: DNA
       137 <213> ORGANISM: Homo sapiens
       139 <220> FEATURE:
       140 <221> NAME/KEY: misc_feature
       141 <222> LOCATION: 82, 406, 426, 434, 462, 536, 551, 558, 563, 567, 582, 584,
       142        592, 638, 651, 660, 664, 673, 675, 697, 706, 711, 715, 716,
       143        717, 723, 724, 725, 733
       144 <223> OTHER INFORMATION: n = A,T,C or G
       146 <400> SEQUENCE: 6
       147 actagtcaaa aatgctaaaa taatttggga gaaaatattt tttaagtagt gttatagttt 60
W--> 148 catgtttatc ttttattatg tnttgtgaag ttgtgtcttt tcactaatta cctatactat 120
       149 gccaatattt ccttatatct atccataaca tttatactac atttgtaaga gaatatgcac 180
       150 gtgaaactta acactttata aggtaaaaat gaggtttcca agatttaata atctgatcaa 240
       151 gttcttgtta tttccaaata gaatggactt ggtctgttaa ggggctaagg gagaagaaga 300
       152 agataaggtt aaaagttgtt aatgaccaaa cattctaaaa gaaatgcaaa aaaaaattta 360
W--> 153 ttttcaagcc ttcgaactat ttaaggaaag caaaatcatt tcctanatgc atatcatttg 420
W--> 154 tgagantttc tcantaatat cctgaatcat tcatttcagc tnaggcttca tgttgactcg 480
W--> 155 atatgtcatc tagggaaagt ctatttcatg gtccaaacct gttgccatag ttggtnaggc 540
W--> 156 tttcctttaa ntgtgaanta ttnacangaa attttctctt tnanagttct tnatagggtt 600
W--> 157 aggggtgtgg gaaaagcttc taacaatctg tagtgttncg tgttatctgt ncagaaccan 660
W--> 158 aatnacggat cgnangaagg actgggtcta tttacangaa cgaatnatct ngttnnntgt 720
W--> 159 gtnnncaact ccngggagcc                                           740
       161 <210> SEQ ID NO: 7
       162 <211> LENGTH: 670
       163 <212> TYPE: DNA
       164 <213> ORGANISM: Homo sapiens
       166 <220> FEATURE:
       167 <221> NAME/KEY: misc_feature
       168 <222> LOCATION: 265, 268, 457, 470, 485, 546, 553, 566, 590, 596, 613, 624,
       169        639, 653, 659, 661
       170 <223> OTHER INFORMATION: n = A,T,C or G
       172 <400> SEQUENCE: 7
       173 gctggggagc tcggcatggc ggtccccgct gcagccatgg ggccctcggc gttgggccag 60
       174 agcggccccg gctcgatggc cccgtggtgc tcagtgagca gcggcccgtc gcgctacgtg 120
       175 cttgggatgc aggagctgtt ccggggccac agcaagaccg cgagttcctg gcgcacagcg 180
       176 ccaaggtgca ctcggtggcc tggagttgcg acgggcgtcg cctacctcgg ggtcttcgac 240
```

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```

```
W--> 177 aagacgccac gtcttcttgc tgganaanga ccgttggtca aagaaaacaa ttatcgggga 300
     178 catggggata gtgtggacca ctttgttggc atccaagtaa tcctgaccta tttgttacgg 360
     179 cgtctggaga taaaaccatt cgcatctggg atgtgaggac tacaaaatgc attgccactg 420
W--> 180 tgaacactaa aggggagaac attaatatct gctggantcc tgatgggcan accattgctg 480
W--> 181 tagcnacaag gatgatgtgg tgactttatt gatgccaaga aaccccgttc caaagcaaaa 540
W--> 182 aaacanttcc aanttcgaag tcaccnaaat ctcctggaac aatgaacatn aatatnttct 600
W--> 183 tcctgacaat ggnccttggg tgtntcacat cctcagctnc cccaaaactg aancctgtnc 660
W--> 184 natccacccc                                                       670
     186 <210> SEQ ID NO: 8
     187 <211> LENGTH: 689
     188 <212> TYPE: DNA
     189 <213> ORGANISM: Homo sapiens
     191 <220> FEATURE:
     192 <221> NAME/KEY: misc_feature
     193 <222> LOCATION: 253, 335, 410, 428, 448, 458, 466, 479, 480, 482, 483, 485,
     194        488, 491, 492, 495, 499, 500, 502, 503, 512, 516, 524, 525,
     195        526, 527, 530, 540, 546, 550, 581, 593, 594, 601, 606, 609,
     196        610, 620, 621, 622, 628, 641, 646, 656, 673
     197 <223> OTHER INFORMATION: n = A,T,C or G
     199 <400> SEQUENCE: 8
     200 actagtatct aggaatgaac agtaaaagag gagcagttgg ctacttgatt acaacagagt 60
     201 aaatgaagta ctggatttgg gaaaacctgg ttttattaga acatatggaa tgaaagccta 120
     202 cacctagcat tgcctactta gccccctgaa ttaacagagc ccaattgaga caaacccctg 180
     203 gcaacaggaa attcaaggga gaaaaagtaa gcaacttggg ctaggatgag ctgactccct 240
W--> 204 tagagcaaag ganagacagc ccccattacc aaataccatt tttgcctggg gcttgtgcag 300
W--> 205 ctggcagtgt tcctgccca gcatggcacc ttatngtttt gatagcaact tcgttgaatt 360
W--> 206 ttcaccaact tattacttga aattataata tagcctgtcc gtttgctgtn tccaggctgt 420
W--> 207 gatatatntt cctagtggtt tgactttnaa aataaatnag gtttantttt ctcccccnn 480
W--> 208 cnntnctncc nntcnctcnn cnntccccc cnctcngtcc tccnnnnttn ggggggccn 540
W--> 209 ccccncggn ggacccccct ttggtccctt agtggaggtt natggcccct ggnnttatcc 600
W--> 210 nggccntann tttccccgtn nnaaatgntt cccctccca ntcccnccac ctcaanccgg 660
W--> 211 aagcctaagt ttntaccctg ggggtcccc                                  689
     213 <210> SEQ ID NO: 9
     214 <211> LENGTH: 674
     215 <212> TYPE: DNA
     216 <213> ORGANISM: Homo sapiens
     218 <220> FEATURE:
     219 <221> NAME/KEY: misc_feature
     220 <222> LOCATION: 602, 632, 639, 668
     221 <223> OTHER INFORMATION: n = A,T,C or G
     223 <400> SEQUENCE: 9
     224 gtccactctc ctttgagtgt actgtcttac tgtgcactct gtttttcaac tttctagata 60
     225 taaaaaatgc ttgttctata gtggagtaag agctcacaca cccaaggcag caagataact 120
     226 gaaaaaagcg aggctttttt gccaccttgg taaaggccag ttcactgcta tagaactgct 180
     227 ataagcctga agggaagtag ctatgagact ttccattttt cttagttctc ccaataggct 240
     228 ccttcatgga aaaaggcttc ctgtaataat tttcacctaa tgaattagca gtgtgattat 300
     229 ttctgaaata agagacaaat tgggccgcag agtcttcctg tgatttaaaa taaacaaccc 360
     230 aaagtttgt ttggtcttca ccaaaggaca tactctaggg ggtatgttgt tgaagacatt 420
     231 caaaaacatt agctgttctg tctttcaatt tcaagttatt ttggagactg cctccatgtg 480
```

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```
        232 agttaattac tttgctctgg aactagcatt attgtcatta tcatcacatt ctgtcatcat 540
        233 catctgaata atattgtgga tttccccctc tgcttgcatc ttcttttgac tcctctggga 600
W--> 234 anaaatgtca aaaaaaaagg tcgatctact cngcaaggnc catctaatca ctgcgctgga 660
W--> 235 aggacccnct gccc                                                   674
        237 <210> SEQ ID NO: 10
        238 <211> LENGTH: 346
        239 <212> TYPE: DNA
        240 <213> ORGANISM: Homo sapiens
        242 <220> FEATURE:
        243 <221> NAME/KEY: misc_feature
        244 <222> LOCATION: 320, 321, 322, 325, 326, 328, 329, 330, 332, 333, 334, 335,
        245       342
        246 <223> OTHER INFORMATION: n = A,T,C or G
        248 <400> SEQUENCE: 10
        249 actagtctgc tgatagaaag cactatacat cctattgttt ctttctttcc aaaatcagcc 60
        250 ttctgtctgt aacaaaaatg tactttatag agatggagga aaaggtctaa tactacatag 120
        251 ccttaagtgt ttctgtcatt gttcaagtgt attttctgta acagaaacat atttggaatg 180
        252 tttttctttt ccccttataa attgtaattc ctgaaatact gctgctttaa aaagtcccac 240
        253 tgtcagatta tattatctaa caattgaata ttgtaaatat acttgtctta cctctcaata 300
W--> 254 aaagggtact tttctattan nnagnngnnn gnnnnataaa anaaaa              346
        256 <210> SEQ ID NO: 11
        257 <211> LENGTH: 602
        258 <212> TYPE: DNA
        259 <213> ORGANISM: Homo sapiens
        261 <400> SEQUENCE: 11
        262 actagtaaaa agcagcattg ccaaataatc cctaattttc cactaaaaat ataatgaaat 60
        263 gatgttaagc tttttgaaaa gtttaggtta aacctactgt tgttagatta atgtatttgt 120
        264 tgcttccctt tatctggaat gtggcattag cttttttatt ttaaccctct ttaattctta 180
        265 ttcaattcca tgacttaagg ttggagagct aaacactggg atttttggat aacagactga 240
        266 cagttttgca taattataat cggcattgta catagaaagg atatggctac cttttgttaa 300
        267 atctgcactt tctaaatatc aaaaaaggga aatgaagtta taaatcaatt tttgtataat 360
        268 ctgtttgaaa catgagtttt atttgcttaa tattagggct ttgccccttt tctgtaagtc 420
        269 tcttgggatc ctgtgtagaa ctgttctcat taaacaccaa acagttaagt ccattctctg 480
        270 gtactagcta caaattcggt ttcatattct acttaacaat ttaaataaac tgaaatattt 540
        271 ctagatggtc tacttctgtt catataaaaa caaaacttga tttccaaaaa aaaaaaaaa 600
        272 aa                                                                602
        274 <210> SEQ ID NO: 12
        275 <211> LENGTH: 685
        276 <212> TYPE: DNA
        277 <213> ORGANISM: Homo sapiens
        279 <220> FEATURE:
        280 <221> NAME/KEY: misc_feature
        281 <222> LOCATION: 170, 279, 318, 321, 322, 422, 450, 453, 459, 467, 468, 470,
        282       473, 475, 482, 485, 486, 491, 498, 503, 506, 509, 522, 526,
        283       527, 528, 538, 542, 544, 551, 567, 568, 569, 574, 576, 582,
        284       587, 588, 589, 590, 592, 593, 598, 599, 603, 605, 608
        285 <223> OTHER INFORMATION: n = A,T,C or G
        287 <221> NAME/KEY: misc_feature
        288 <222> LOCATION: 633, 634, 635, 644, 646, 648, 651, 655, 660, 662, 663, 672,
```

Use of n and / or Xaa has been detected in the
Sequence Listing. Review the Sequence Listing
to ensure a corresponding explanation is present
in the <220> to <223> fields of each sequence
using n or Xaa.

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```
L:30  M:270 C: Current Application Number differs, Wrong Format
L:51  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:52  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:86  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:103 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:104 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:121 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:126 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:128 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:129 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:130 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:131 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:132 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:148 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:153 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:154 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:155 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:156 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:157 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:158 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:159 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:177 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:180 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:181 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:182 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:183 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:184 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:204 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:205 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:206 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:207 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:208 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:209 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:210 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:211 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:234 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:235 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:254 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:297 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:298 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:300 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:301 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:302 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:303 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:304 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:326 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:327 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
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       Input Set : A:\455c17.app.txt
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L:328 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:329 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:345 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14